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Imputing the Minimum Social Value of Public Healthcare: A General Equilibrium Model of Israel

Authors: Erez Yerushalmi, Sani Ziv

Abstract: The rising demand for healthcare services, without a corresponding rise in public supply, led to a debate on whether to increase private healthcare provision - especially in hospital services and second-tier healthcare. Proponents for increasing private healthcare highlight gains in efficiency, while opponents its risk to social welfare. None, however, provide a measure of the social value and its impact on the economy in terms of a monetary value. In this paper, we impute a minimum social value of public healthcare that corresponds to indifference between gains in efficiency, with losses to social welfare. Our approach resembles contingent valuation methods that introduce a hypothetical market for non-commodities, but is different from them because we use numerical simulation techniques to exploit certain market failure conditions. In this paper, we develop a general equilibrium model that distinguishes between public-private healthcare services and public-private financing. Furthermore, the social value is modelled as a by product of healthcare services. The model is then calibrated to our unique health focused Social Accounting Matrix of Israel, and simulates the introduction of a hypothetical health-labour market - given that it is heavily regulated in the baseline (i.e., the true situation in Israel today). For baseline parameters, we estimate the minimum social value at around 18% public healthcare financing. The intuition is that the gain in economic welfare from improved efficiency, is offset by the loss in social welfare due to a reduction in available social value. We furthermore simulate a deregulated healthcare scenario that internalizes the imputed value of social value and searches for the optimal weight of public and private healthcare provision.

Keywords: contingent valuation method (CVM), general equilibrium model, hypothetical market, private-public healthcare,

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